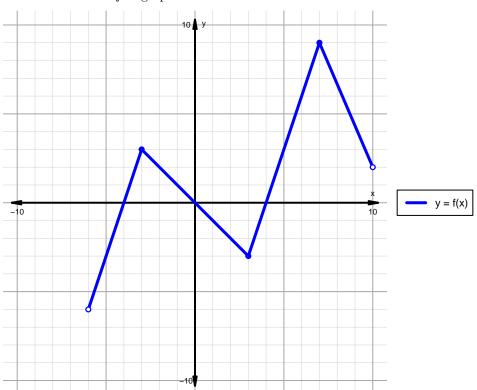
## Intervals, Transformations, and Slope EXAM (version 117)

1. The function f is graphed below.

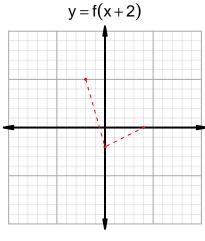


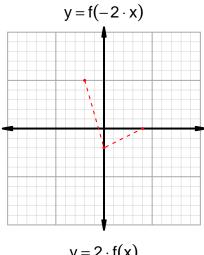
Indicate the following intervals using interval notation. Remember, you can use  $\cup$  between two intervals to indicate the union. Except for range, all intervals will indicate x values; this is standard.

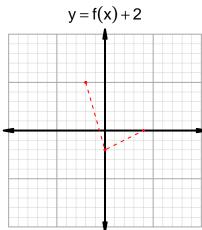
Feature	Where
Positive	
Negative	
Increasing	
Decreasing	
Domain	
Range	

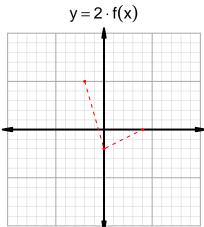
## Intervals, Transformations, and Slope EXAM (version 117)

2. In the four graphs below, y = f(x) is graphed as a dotted line. With a solid line, please graph the transformations indicated by the equations below.









3. Let function g be defined by the table below. Use the formula  $\frac{g(x_2)-g(x_1)}{x_2-x_1}$  to find the average rate of change between  $x_1=79$  and  $x_2=87$ . Express your answer as a reduced fraction.

$\overline{x}$	g(x)
19	87
37	79
79	19
87	37